

IN THE CLAIMS

Please replace all prior versions, and listings, of claims with the following listing of claims.

1. – 29. (Canceled)

30. (New) A method, comprising:
depositing a fiducial into a target region of a patient;
detecting the fiducial using electromagnetic radiation to locate the target region of the patient; and
performing stereotaxic radiosurgery on the target region of the patient according to the detected fiducial and the location of the target region.

31. (New) The method of claim 30, further comprising tracking the target region during the stereotaxic radiosurgery.

32. (New) The method of claim 30, further comprising applying radiation treatment to the target region.

33. (New) The method of claim 30, further comprising anchoring the fiducial in the target region to prevent migration of the fiducial relative to the target region.

34. (New) The method of claim 30, wherein detecting the fiducial comprises viewing the fiducial using an x-ray imager, wherein the fiducial comprises a radiopaque material.

35. (New) The method of claim 30, wherein detecting the fiducial comprises viewing the fiducial using an ultrasonic imager, wherein the fiducial comprises an ultrasonic opaque material.

36. (New) A fiducial apparatus, comprising:
a body portion having a housing, the body portion comprising a material visible using electromagnetic radiation; and
an anchor member coupled to the body portion, the anchor member having an unanchored position and an anchored position, the anchor member drawn into the housing in the unanchored position and withdrawn from the housing in the anchored position.

37. (New) The apparatus of claim 36, further comprising an elastic member coupled to the anchor member and the body portion, the elastic member to urge the anchor member from the unanchored position to the anchored position.

38. (New) The apparatus of claim 37, wherein the elastic member comprises a spring coupled between the anchor member and the body portion to urge the anchor member to withdraw from the housing.

39. (New) The apparatus of claim 37, wherein the anchor member comprises a pyramidal spike to embed into a target region.

40. (New) The apparatus of claim 37, wherein the anchor member comprises an elongated rectangular shaped member.

41. (New) The apparatus of claim 40, wherein the elongated rectangular shaped member comprises a first end and a second end, the elastic member coupled to the elongated rectangular shaped member at the first end to urge the second end away from the body portion.

42. (New) The apparatus of claim 36, wherein the body portion comprises a memory metal member that bends in response to a presence or an absence of an appropriate signal.

43. (New) The apparatus of claim 42, wherein the appropriate signal comprises an electromagnetic signal or an ambient temperature.

44. (New) The apparatus of claim 36, wherein the material comprises an ultrasonic opaque material visible using an ultrasonic imager.

45. (New) The apparatus of claim 36, wherein the material comprises a radiopaque material visible using an x-ray imager.

46. (New) A method, comprising:
inserting an insertion needle into a tissue target region of a patient, the insertion needle containing a fiducial in an unanchored position, the fiducial comprising a body portion and an anchor member coupled to the body portion,

the body portion having a housing, the anchor member drawn into the housing in the unanchored position;

displacing a portion of the tissue target region; and

depositing the fiducial into the tissue target region, the anchor member withdrawing from the housing and embedding in the tissue target region in response to the fiducial exiting the insertion needle.

47. (New) The method of claim 46, further comprising moving the anchor member from the unanchored position to an anchored position withdrawn from the housing.

48. (New) The method of claim 46, further comprising using an ultrasonic imager to view the deposited fiducial.

49. (New) The method of claim 46, further comprising using an x-ray imager to view the deposited fiducial.

50. (New) The method of claim 46, further comprising applying an electromagnetic signal to the fiducial to maintain the fiducial in the unanchored position during insertion into the tissue target region, wherein the fiducial comprises a memory metal member that bends in response to a presence or an absence of the electromagnetic signal.

51. (New) The method of claim 46, wherein the tissue target region comprises a tumor.

52. (New) A fiducial apparatus, comprising:

means for coupling an anchor member to a body portion, the body portion having a housing, the anchor member drawn into the housing in an unanchored position;

means for displacing a portion of a tissue target region; and

means for embedding the anchor member in the tissue target region.

53. (New) The apparatus of claim 52, means for urging the anchor member from the unanchored position to an anchored position.

54. (New) The apparatus of claim 52, further comprising means for viewing the fiducial within the tissue target region using an ultrasonic imager.

55. (New) The apparatus of claim 52, further comprising means for viewing the fiducial within the tissue target region using an x-ray imager.

56. (New) The apparatus of claim 52, wherein the tissue target region comprises a tumor.

57. (New) A fiducial apparatus, comprising:

an elastic body portion having an unanchored position and an anchored position, the elastic body portion expandable to receive a material in an internal cavity in the anchored position, the material visible using electromagnetic radiation; and

a lumen coupled to the elastic body portion to provide a channel for the material to enter the internal cavity of the elastic body portion.

58. (New) The apparatus of claim 57, wherein the elastic body portion and the lumen comprise a single tube.

59. (New) The apparatus of claim 57, wherein the material comprises a radiopaque fluid or an ultrasonic opaque fluid.

60. (New) The apparatus of claim 57, wherein the material comprises a radiopaque non-fluid substance or an ultrasonic opaque non-fluid substance.

61. (New) A method, comprising:
inserting a fiducial in an unanchored position into a target tissue region, the fiducial comprising an elastic body portion defining an internal cavity;
displacing a portion of the tissue target region; and
depositing a material into the internal cavity of the elastic body portion to expand and anchor the elastic body portion within the tissue target region, the material visible using electromagnetic radiation.

62. (New) The method of claim 61, further comprising supplying the material to the internal cavity through a lumen coupled to the elastic body portion.

63. (New) The method of claim 61, wherein the tissue target region comprises a tumor.

64. (New) The method of claim 61, further comprising using an ultrasonic imager to view the material within the deposited fiducial.

65. (New) The method of claim 61, further comprising using an x-ray imager to view the material within the deposited fiducial.